## Listing of the Claims

- 1. (Currently Amended) A detector arrangement with a plurality of detector elements or image pixels, which each have an integrated SD modulator—(20 to 29), wherein the SD modulator (20 to 29) has a differential design and/or a plurality of stages.
- 2. (Currently Amended) A detector arrangement as claimed in claim 1, wherein the SD modulator (20 to 29) is extended with a decimation filter (30) to a SD-A/D converter.
- 3. (Currently Amended) A detector arrangement as claimed in claim 1, wherein the detector elements or image pixels as well as the SD modulators (20 to 29) are realized on a CMOS- semiconductor structure.
- 4. (Currently Amended) A detector arrangement as claimed in claim 1, wherein the SD modulator (20 to 29) has a current feedback (20) on the signal of the detector element with an SC current source.
- 5. (Currently Amended) A detector arrangement as claimed in claim 1, wherein a cascaded arrangement of SD modulators (20 to 29) in at least one detector element or image pixel is provided (29).
- 6. (Currently Amended) A detector arrangement as claimed in claim 1, wherein the SD modulator (20-to-29) has an Auto- Zero- Comparator (29).
- 7. (Original) A semiconductor-based image sensor with a detector arrangement as claimed in claim 1.
- 8. (Original) An X-ray detector with a detector arrangement as claimed in claim 1.
- 9. (Original) An X-ray apparatus, particularly for computer tomography, with a detector arrangement as claimed in claim 1.